

Natural Resources Conservation Service One Credit Union Place, Suite 340 Harrisburg, PA 17110-2993

November 3, 2008

ENGINEERING FIELD HANDBOOK NOTICE PA-32

A revised table of 24-hour design rainfall amounts per various frequencies for PA counties has been developed. These are based upon National Weather Service NOAA Atlas 14 and replace previous values from TP-40 listed for use with EFH-2, listed in the EFH on pages 2-14.1-3. The old values should no longer be used for design purposes.

The designer should continue to use the NRCS Type II Distribution with this new rainfall data when analyzing for peak discharge computations.

The EFH-2 computer data files for this data have been downloaded onto your computer. They can also be found on the PA NRCS website.

There is too much variation across certain counties to allow for an accurate statement of a singular county value of rainfall depth for the 24-hr, 50 and 100-year frequency storms. The user is directed to the following website at which they can enter the design site's lat/long coordinates to derive these values: http://hdsc.nws.noaa.gov/hdsc/pfds/orb/pa_pfds.html

The 5-minute duration rainfall amounts to be used for roof runoff management designs across the state are to stay the same, 0.5 inches for the 10-year frequency and 0.6 inches for the 25-yr storm.

The EFH and has been updated on the PA NRCS website by adding Sheets 2-14.A & B to replace Sheets 2-14.1-3 (03/14/79).

FILING:

All revisions have been added to the web-files; however, for those maintaining a hardcopy you are instructed to download and insert the new Sheets 2-14.A & B. Discard the old Sheets 2-14.1-3.

Questions concerning this note should be directed to the State Hydraulic Engineer, Geoff Cerrelli.

/s/ CRAIG R. DERICKSON

CRAIG R. DERICKSON State Conservationist

DIST: All holders of the Engineering Field Handbook (formerly EFM)

Helping People Help the Land





Natural Resources Conservation Service One Credit Union Place, Suite 340 Harrisburg, PA 17110-2993

April 1, 2008

ENGINEERING FIELD HANDBOOK NOTICE PA-31

On December 10, 2007, a new Tractive Stress design method for Grassed Waterways was posted on the Electronic Directives Web site at: http://directives.sc.egov.usda.gov/media/pdf/H 210 650 7.pdf. Please be advised that either the new method or the allowable velocity method of waterway design will be allowed for use in PA, and both design methods may be filed in Chapter 7 of the EFH.

Pages 2-42.1&2 (Hydrologic Soil Groups for common PA soils) have been removed from the EFH. These pages were outdated. Current data can be accessed at http://soildatamart.nrcs.usda.gov/ as follows: select State, select County, select Generate Report, select All Map Units, from the pull down menu select RUSLE2 Related Attributes, and select Generate Report.

Three new spreadsheets for Rock Lined Waterway designs have been added to the EFH. These have been inserted in the web version of the EFH, and are listed on page EFH 5-30.

Several new guides, drawings, etc, have been added recently; however, only pen & ink changes were made to the lists of these documents. Therefore, the following lists in the EFH have been updated on the PA NRCS website as listed below:

Standard PA Drawings index and corresponding EFH page 5-27b PA Design Guides index and corresponding EFH page 5-28 PA Construction Guides index and corresponding EFH page 5-29 PA Engineering Spreadsheets index and corresponding EFH page 5-30 PA Fact Sheets index and corresponding EFH page 5-31 (these Fact Sheets have also been given EFH page numbers so that the hard-copies can be filed in one location)

FILING:

All revisions have been added to the web-files; however, for those maintaining a hardcopy:

Download and insert the new EFH Chapter 7, and also retain the old Chapter 7. Remove EFH pages 2-42.1&2.

Replace EFH page 5-27b (dated 10/25/06) with 5-27 (April 1, 2008)

Replace EFH page 5-28 (dated 2/13/06) with 5-28 (April 1, 2008)

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Replace EFH page 5-29 (dated 8/30/04) with 5-29 (April 1, 2008) Replace EFH page 5-30 (dated 4/25/07) with 5-30 (April 1, 2008) Replace EFH page 5-31 (dated 4/16/04) with 5-31 (April 1, 2008) Add EFH pages 5-31a thru 31c (dated April 1, 2008) after page 5-31

If you have any questions regarding these materials, please contact the Assistant State Conservation Engineer, Hosea Latshaw.

CRAIG R. DERICKSON State Conservationist



Natural Resources Conservation Service One Credit Union Place, Suite 340 Harrisburg, PA 17110-2993

Sept. 18, 2007

ENGINEERING FIELD HANDBOOK NOTICE PA-30

A new Construction Guide, PA-2, Well Decommissioning, along with 6 new Standard Drawings, PA-076 thru -081, have been added to the Engineering Shared drive. CG PA-2 provides detailed instructions for decommissioning wells, while the standard drawings supplement the guide (as Figures 1-6) and can be used individually as construction plans.

As with all engineering drawings, spreadsheets, etc., if you do not have access to the shared engineering drive, but need and have the authority level to utilize these drawings, contact your area engineer.

FILING:

Make a pen & ink change to EFH page 5-27b (dated 10/25/06) to add PA076 – 081 (Well Decommissioning, date 9/07, size "S") — Make a pen & ink change to EFH page 5-29 (dated 8/30/04) to add CG PA-2 (location EFH 12-50.1-12, date 9/07). Insert CG PA-2 (pages EFH 12-50.1 thru .12) after EFH page 12-50.

If you have any questions regarding these materials, please contact the State Project Engineer, Alan Wood.

/s/ Anne Anderson, Acting

CRAIG R. DERICKSON State Conservationist



Natural Resources Conservation Service One Credit Union Place, Suite 340 Harrisburg, PA 17110-2993

June 7, 2007

ENGINEERING FIELD HANDBOOK NOTICE PA-29

Two standard drawings have been revised and placed on the shared "engineering drive", under the folder "AutoCADD Drawings", in the subfolder "PA Standard Drawings June 2007":

- PA-064; changes to format and dimensions along well.
- PA-071; changes to waterstop and addition of floor steel table.

As with all engineering drawings, spreadsheets, etc., if you do not have access to the shared engineering drive, but need and have the authority level to utilize these drawings, contact your area engineer.

<u>FILING</u>: Make a pen & ink change to EFH pages 5-27 a & b (dated 10/25/06) that the new dates for PA-064 and -071 are 6/07 and 5/07, respectively.

If you have any questions regarding these drawings, please contact the State Project Engineer, Alan Wood.

CRAIG R. DERICKSON State Conservationist



Suite 340 **One Credit Union Place** Harrisburg, PA 17110

April 25, 2007

ENGINEERING FIELD HANDBOOK NOTICE PA-28

A new spreadsheet has been added to the PA Standard Spreadsheets; PA-SS-007, Watering Systems (Pressurized). It is available in the Shared Engineering drive, in the "Excel Spreadsheets" folder. Like the other spreadsheets, this software has been developed to assist with the design of various conservation practices.

Attached is the revised page 5-30 (4/25/07) of the EFH which adds this software to the list of PA Standard Spreadsheets. Remove any previous versions of this page.

Please be reminded that the design of a specific practice requires approval by the person with appropriate engineering job approval authority.

CRAIG R. DERICKSON ading

State Conservationist

Enclosure



Natural Resources Conservation Service One Credit Union Place, Suite 340 Harrisburg, Pennsylvania 17110-2993 Ph. (717) 237-2100 Fax: (717) 237-2238

March 19, 2007

ENGINEERING FIELD HANDBOOK NOTICE PA-27

ACTION: Please make a pen/ink change to EFH page 5-28 (Index of PA Design Guides) changing the date of PA-5 Wastewater Treatment Strip Design to 3/07.

BACKGROUND: A new PA-5 Design Guide for Wastewater Treatment Strips has recently been issued. Old versions of the Wastewater Treatment Strip Design Guide should be removed and discarded. The most current Design Guide PA-3 covering "Use of STD. DRWGS. PA-051 & PA 052 – Wooden Walls" still exists and is not to be discarded.

If you have any questions please contact Hosea Latshaw.

CRAIG R. DERICKSON

State Conservationist



Suite 340 One Credit Union Place Harrisburg, PA 17110

October 25, 2006

ENGINEERING FIELD HANDBOOK NOTICE PA-26

Several new standard drawings have been prepared and placed on the shared "engineering drive", under the folder "AutoCADD Drawings", in the subfolder "PA Standard Drawings Oct 2006"

The new drawings include:

- PA-029 thru -030; slat stream crossings.
- PA-031 thru -034; riprap stream crossings.
- PA -073 thru -075; sinkhole rehabilitation.

A spreadsheet, PA-SS-006, was also prepared to help design stream crossings, and is available on the shared engineering drive under the folder "Excel Spreadsheets".

<u>FILING</u>: Remove EFH pages 5-27, 5-27a, and 5-30, and replace with the attached pages 5-27, 5-27a & b, and 5-30 (dated 10/25/06).

If you have any questions regarding these drawings, please contact the State Project Engineer, Alan Wood.

CRAIG R. DERICKSON State Conservationist

Enclosures

DIST: All holders of the Engineering Field Handbook (formerly the EFM)

Michan



Suite 340 One Credit Union Place Harrisburg, PA 17110

February 16, 2006

ENGINEERING FIELD HANDBOOK NOTICE PA-25

Several standard drawings have been revised, and some deleted. Therefore EFH pages 5-27, 5-27a, and -27b have been revised. All standard drawings, including the new ones, are available on the shared "engineering drive", under the folder "AutoCADD Drawings", in the subfolder "PA Standard Drawings_Feb 2006" (except PA-006 & -015 which exist only as hard copies and will be put on e-files at a later date).

The changes include:

- PA-017 thru -028 have been replaced with a reorganized sequence of wall drawings.
- PA-029 thru -034, -060, and -062 have been deleted.
- The extensions .4, .6, & .8 on PA-057 thru -059 have been changed to A, B, & C respectively.
- "Stand-alone" options of drawings are listed with letter extensions (e.g. A, B,....); drawings that require all sheets in a set to be used have only the number listed.

<u>FILING</u>: Remove EFH pages 5-27, 5-27a, and 5-27b (with previous dates) and replace with the attached pages 5-27 and 5-27a (dated 2/16/06). Discard any hard copies of previous versions of Standard Drawings PA-17 thru -34, PA-057 thru -60, and PA-062.

In addition, PA Design Guides 6 thru 8, which are to be used in the design of 8-foot reinforced concrete walls (on Standard Drawing PA-028), are also now available on the shared engineering drive. (These were added to the PA Design Guides index via EFH Notice 24.)

If you have any questions regarding these drawings, please contact the State Project Engineer, Alan Wood.

/S/ Gary Smith, Acting

ROBIN E. HEARD State Conservationist

Enclosures



Suite 340 One Credit Union Place Harrisburg, PA 17110

February 13, 2006

ENGINEERING FIELD HANDBOOK NOTICE PA-24

Several design guides have been provided over the past few years; however some had duplicate numbers. In addition, some have been revised and new ones added. Therefore, EFH page 5-28 has been revised as follows:

- PA-3; new title
- PA-4; new sent out under AWMFH Notice PA-13
- PA-5; was also originally PA-3 (vegetated filter area design), so was given a new number and title
- PA-6 thru -8; new will be sent out shortly with revised standard drawings

Remove page 5-28, dated 8/30/04 and replace with the attached new page 5-28, dated 2/13/06.

ROBIN E HEARD /s/ State Conservationist

Enclosures



Suite 340 One Credit Union Place Harrisburg, PA 17110

November 2, 2004

ENGINEERING FIELD HANDBOOK NOTICE PA-23

Fact Sheet NRCS-PA-ENG-FS-03, is being re-issued to provide additional emphasis on safety with regard to gravity pipe manure transfer systems. It should be provided to operators of such systems during the planning and design phases of these systems, and to those who already have gravity transfer lines to help with operation and maintenance.

Please make a "pen and ink" change to the listing of Fact Sheets on page 5-31 of the EFH to reflect that the revised Fact Sheet #3 is dated 9/04. Also, please destroy the previous version of this Fact Sheet.

ROBIN E HEARD State Conservationist

Enclosure



Suite 340 One Credit Union Place Harrisburg, PA 17110

August 30, 2004

ENGINEERING FIELD HANDBOOK NOTICE PA-22

Several design and construction guides have been provided over the past few years; however no listing was made to catalog them. Over the same period, 3 new standard drawings were made available, but not included on the EFH list of standard drawings. To accommodate these and future documents, the following EFH pages are being revised as follows:

<u>EFH page 5-28</u> – make a pen and ink change to be page <u>5-27a.</u> (We expect in the near future to be revising several of the standard drawings listed on this page and will provide a new page at that time.)

EFH page 5-29 – remove the existing page and replace with the attached page <u>5-27b</u>. (This new page includes new standard drawings PA-070, 071, 072. It also notes that PA-062 should be deleted, and that the titles of PA-061 and PA-065 have changed.)

Insert the attached new pages 5-28 & 29, which list the design and construction guides.

ROBIN E HEARD /s/ State Conservationist

Enclosures



Suite 340 One Credit Union Place Harrisburg, PA 17110

July 8, 2004

ENGINEERING FIELD HANDBOOK NOTICE PA-21

This notice corrects the information distributed by ENGINEERING FIELD HANDBOOK Notice PA-20 (July 2, 2004). The Mono-sloped Roof Structure drawing should have been identified as Standard Drawing PA-072 (not PA-070).

In addition by way of this notice, two new standard drawings, PA-070 (Shallow Well Pump Watering System), and PA-071 (Deep Well Pump Watering System) are being issued.

All three of these new drawings can be obtained from the shared folder at "eng on harrisbuc001/AUTO CAD Drawings/PA Standard Drawings". Please contact your technical center for assistance in their application.

Until an updated list of PA standard drawings is issued, make a "pen & ink" addition of these drawings to the list on EFH page 5-29.

ROBIN E HEARD State Conservationist



Suite 340 One Credit Union Place Harrisburg, PA 17110

July 2, 2004

ENGINEERING FIELD HANDBOOK NOTICE PA-20

By way of this notice, new standard drawing, PA-070 Mono-sloped Roof Structure, is being issued. It can be obtained from the shared folder at "eng on harrisbuc001/AUTO CAD Drawings/Roofs/PA-070". Please contact your technical center for assistance in its application.

Until an updated list of PA standard drawings is issued, make a "pen & ink" addition of this drawing to the list on EFH page 5-29.

ROBIN E HEARD /s/ State Conservationist



Suite 340 One Credit Union Place Harrisburg, PA 17110

April 16, 2004

ENGINEERING FIELD HANDBOOK NOTICE PA-19

A new Fact Sheet, NRCS-PA-ENG-FS-03, is being issued to provide information on gravity pipe manure transfer systems. It can be provided to operators of such systems during the planning and design phases of these systems, and to those who already have gravity transfer lines to help with operation and maintenance.

Also attached is a revised list of PA Fact Sheets to include FS-03 and correct the date of FS-02. Remove the EFH page 5-31 dated 9/10/03 and replace with this one. It is recommended that the fact sheets themselves be filed in a separate folder, as are PA Spreadsheets and PA Standard Drawings, and/or placed with other references on applicable practices (e.g. concrete construction).

ROBIN E HEARD

State Conservationist

Day P. Smit



Suite 340 One Credit Union Place Harrisburg, PA 17110

October 14, 2003

ENGINEERING FIELD HANDBOOK NOTICE PA-18

Recently there has been some concern regarding the use of heat to bend reinforcing steel. As background the following is provided:

- a) CRSI says, "field welding should be avoided" and "heating of large bars (#14 #18) is allowed for bending only with a structural engineer's approval."
- b) ACI says, "welding of cross bars is not permitted without the authorization of a structural engineer"; they do not mention heating for bending.
- c) The NRCS National Tech Center (Ft. Worth) has stated that, "not a good idea to allow any heat bending."

Therefore, the attached page is to be a supplement to the EFH, Chapter 17, regarding PA's policy on heating of steel rebars, effective immediately. It should be filed after EFH page 17-26.

ROBIN E HEARD State Conservationist

Enclosure



Suite 340
One Credit Union Place
Harrisburg, PA 17110

September 10, 2003

ENGINEERING FIELD HANDBOOK NOTICE PA-17

In February 1995, fact sheet "Soil Cave-in – A Fatal Slip" was sent out to improve safety during excavation. Since the issue of that fact sheet, it has been decided to continue providing similar fact sheets that are helpful for field application of engineering conservation practices, but which need not be an official part of a standard or specification. This series of fact sheets will be labeled NRCS-PA-ENG-FS-xx. Therefore, the original cave-in fact sheet is being designated as NRCS-PA-ENG-FS-01.

A second Fact Sheet, NRCS-PA-ENG-FS-02, is being issued to provide information on concrete construction during cold weather. It can be provided to contractors during relevant construction. Please note that this fact sheet does not replicate all the information in ACI-306, and in fact notes that ACI-306 should be used for complete cold weather concrete information. (In the near future, a revised version of the PA-313 Construction Specification will include less information on cold weather concreting.)

The attached list of PA Fact Sheets is a supplement to the Engineering Field Handbook. It should be filed after EFH page 5-30. It is recommended that fact sheets be filed in a separate folder, as are PA Spreadsheets and PA Standard Drawings, and/or placed with other references on applicable practices (e.g. concrete construction).

ROBIN E HEARD State Conservationist

Hary P. Smith

Enclosures



Suite 340 One Credit Union Place Harrisburg, PA 17110

July 22, 2002

ENGINEERING FIELD HANDBOOK NOTICE PA-16

The enclosed list of standard PA spreadsheets is a supplement to the Engineering Field Handbook. These spreadsheets have been developed to assist with the design of various conservation practices. This list is distributed to all NRCS offices. The computer files of these spreadsheets have been distributed to the Technical Offices and can be requested through those offices.

This list, page 5-30 dated 7/22/02, should be filed after page 5-29.

Please be reminded that the design of a specific practice requires approval by the person with appropriate engineering job approval authority.

Mille Henre acting

State Conservationist

Enclosure



Suite 340 One Credit Union Place Harrisburg, PA 17110

July 18, 2002

ENGINEERING FIELD HANDBOOK NOTICE PA-15

The enclosed list of standard PA drawings is a revision to the list in Chapter 5 of the EFH. This list is distributed to all NRCS offices. The actual drawings have been distributed to the Technical Offices and can be requested through those offices, either in hard copy or CADD file.

This revision, page 5-29 dated 7/18/02, should replace page 5-29 dated 3/25/02. The revised list reflects the following:

- a. PA-004 B & C were revised to clarify the need to cut reinforcing steel under control joints.
- b. PA-053 was revised to better define reinforcement dimensions and placement.
- c. PA-056 was revised to clarify the need to cut reinforcing steel under control joints.
- d. PA-061 and -065 were revised to reflect better methods of installing rootwads.
- e. PA-068 is a new drawing for a pushoff ramp.
- f. PA-069 is a new drawing for liquid-tight slab joints.

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Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

ROBIN E HEARD

State Conservationist



Suite 340 One Credit Union Place Harrisburg, PA 17110

March 25, 2002

ENGINEERING FIELD HANDBOOK NOTICE PA-14

The enclosed list of standard PA drawings is a revision to the list in Chapter 5 of the EFH. This list is distributed to all NRCS offices. The actual drawings have been distributed to the Technical Offices and can be requested through those offices, either in hard copy or CADD file.

This revision, page 5-29 dated 3/25/02, should replace page 5-29 dated 1/29/01.

The new list includes the addition of PA-067, Ag Waste Holding Facility. This is a 5 sheet drawing that reflects the latest approved features of the round concrete tank, for 120' diameters, 10 & 12' high. As other size tanks are approved, their data will be added to this drawing.

Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

ROBIN E. HEARD State Conservationist

Enclosure



Suite 340 One Credit Union Place Harrisburg, PA 17110

January 29, 2001

ENGINEERING FIELD HANDBOOK NOTICE PA-13

The enclosed list of standard PA drawings is a revision to the list in Chapter 5 of the EFH. This list is distributed to all NRCS offices. The actual drawings have been distributed to the Technical Offices and can be requested through those offices, either in hard copy or CADD file.

This revision, page 5-29 dated 1/29/01, should replace page 5-29 dated 1/28/00. The revised list reflects the following:

- a. PA-063 is correctly labeled "Floor/Footing Alternatives Supplement to PA-064", and is now also available in 11" x 17".
- b. PA-064 is correctly labeled "PA Round Tank"
- c. PA-066 is a new drawing for "Used Heavy Equipment Tire Trough".

Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

Mille / Hower acting
JANET L. OERTLY
State Concentrationist

State Conservationist



Suite 340 One Credit Union Place Harrisburg, PA 17110

January 28, 2000

ENGINEERING FIELD HANDBOOK NOTICE PA-12

The enclosed list of standard PA drawings is an addition to the list in Chapter 5 of the EFH. This list is distributed to all NRCS offices. The actual drawings have been distributed to the Technical Offices and can be requested through those offices.

This addition, page 5-29, should be filed behind page 5-28 of your EFH. Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

Also, Standard Drawing PA-060 has been revised and now has a date of 5/99. Please make this pen & ink change on page 5-28.

JANET L. OERTLY State Conservationist

Enclosure

Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

April 12, 1999

ENGINEERING FIELD HANDBOOK NOTICE PA-11

Enclosed is a revised page 5-28 of the EFH. This page updates the listing of standard PA-NRCS drawings to include the addition of new drawings PA-055 through PA-060. These new standard drawings were provided to the area offices and can be requested from them if needed.

The list should be filed in Chapter 5 of the EFH, replacing page 5-28, dated 11/29/96.

Please be reminded that the use of standard drawings for a specific practice requires approval by a person with appropriate engineering approval authority.

JANET L. OERTLY

State Conservationist

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

January 2, 1998

ENGINEERING FIELD HANDBOOK NOTICE PA-10

Enclosed is an ASAE Paper which is to be EFH Supplement PA-6-1. It should be filed at the end of Chapter 6, Structures.

Included within the example in this paper is a procedure for designing rock chutes. This procedure can be simplified to the following:

Given channel parameters (metric): S, B, Z, Q;

- a. Find " D_{50} " using Equation (1), where q=Q/B,
- b. Find "n" using Equation (6),
- c. Find "d" using Equation (9) and let $q_s=q$ (finding the theoretical flow thru the rock voids (q_m) is an unnecessary refinement and does not account for the eventual silting-in of the voids).

Note that the paper recommends 2:1 side slopes, upstream and downstream cutoff trenches (not shown in Figure 1), well-graded rock at least $2D_{50}$ thick, and a geotextile filter underlain with 50mm (2 in.) of sand.

If you have any questions, please call Alan Wood (717-237-2211).

JANET L. OERTLY

Acting

State Conservationist

Enclosure

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

November 29, 1996

ENGINEERING FIELD HANDBOOK NOTICE PA-9

Enclosed is a revised page 5-28 of the EFH. This page updates the listing of standard PA-NRCS drawings to include the addition of new drawings PA-051 through PA-054. These new standard drawings were provided to the area offices and can be requested from them if needed.

The list should be filed in Chapter 5 of the EFH, replacing page 5-28, dated 6/30/95.

Please be reminded that the use of standard drawings for a specific practice requires approval by a person with appropriate engineering approval authority.

JANET L. OERTLY

State Conservationist

Enclosure

Natural Resources Suite 340 Conservation One Credit Service Harrisburg

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

June 30, 1995

ENGINEERING FIELD HANDBOOK NOTICE PA-8

Enclosed is a revised page 5-28 of the EFH. This page updates the listing of standard PA-NRCS drawings to include the addition of new drawings PA-049 (Variable Height Wooden Closure) and PA-050 (Project Identification Sign). These two standard drawings are being provided to the area offices and can be requested from them if needed. Please be reminded that the use of standard drawings for a specific practice requires approval by a person with appropriate engineering approval authority.

JANET L. OERTLY

State Conservationist

Enclosure

Natural Resources Conservation Service

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

March 13, 1995

ENGINEERING FIELD HANDBOOK NOTICE PA-7

Enclosed is a revised version of standard drawing PA-048-558, which was originally distributed with EFH Notice PA-6. After that distribution, several mistakes were identified which are corrected in the new version (3-10-95). Please discard any copies of the original version.

We are sorry for the extra "paper shuffle". We have taken steps to improve our quality control of future drawings and reduce such mistakes.

WILLIAM HUNT Acting STC

Enclosures

Natural Resources Suite 340
Conservation One Credit
Service Harrisburg

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

February 8, 1995

ENGINEERING FIELD HANDBOOK NOTICE PA-6

Enclosed is a revised page 5-28 of the EFH. This page updates the listing of standard PA-NRCS drawings to include the addition of new drawings PA-046 thru PA-048-558. Note also that PA-045 has been revised (4/93) to include PA-045H.

PA-048-558 is being provided with this notice. The other drawings have been provided to the area offices and can be requested from them if needed. Please be reminded that the use of standard drawings for a specific practice requires approval by a person with appropriate engineering approval authority.

WILLIAM HUNT Acting STC

Hary P. Smill

Enclosures

Soil Conservation Service Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

May 5, 1993

ENGINEERING FIELD HANDBOOK NOTICE PA-5

Enclosed is a copy of the new standard drawing, PA-045H. This drawing is for a concrete hopper base, with 6-inch walls, which will not be buried deeper than 16 feet. The base in PA-045G (with 9-inch walls) can continue to be used for depths up to 30 feet. PA-045G has been revised however to allow for designer input of the floor slope and to indicate both a maximum and minimum height. PA-045A has also been revised to show the addition of PA-045H.

The drawings are being provided to each area office and should be requested as needed from them. Please be reminded that the use of standard drawings for a specific practice, requires approval by the person with appropriate engineering job approval authority.

RICHARD N. DUNCAN State Conservationist

Enclosures (area offices only)

Soil Conservation Service Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

March 8, 1993

ENGINEERING FIELD HANDBOOK NOTICE PA-4

Enclosed is a revised page 5-28 of the EFH. This page updates the listing of standard PA-SCS drawings to include the addition of new standard drawings PA-043 thru 045. Note also that PA-040 has been revised as of 10/92.

The drawings are being provided to each area office and should be requested as needed from them. Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

RICHARD N. DUNCAN State Conservationist

Soil Conservation Service Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

March 8, 1993

ENGINEERING FIELD HANDBOOK NOTICE PA-3

Enclosed is a revised copy of page 3-94.1 of the Engineering Field Handbook (EFH), to correct an error in line c. at the center of the page. After computing the discharge (Q) for both inlet and outlet control, the <u>lower Q</u> should be used.

Remove and replace pages 3-94.1 and 3-94.2. The content of the latter page is unchanged. File this notice at the front of the EFH and record it on the Notice Register.

RICHARD N./DUNCKN State Conservationist

Murphy

United States Department of Agriculture

Soil Conservation Service Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

September 17, 1992

ENGINEERING FIELD HANDBOOK NOTICE PA-2

Enclosed is a Table of Contents for Chapter 2 of the Engineering Field Handbook. This Table of Contents includes all the current Pennsylvania and Northeast NTC supplements. The exhibits which do not apply in Pennsylvania are identified in the Table of Contents.

The Table of Contents should be filed at the beginning of Chapter 2 of the EFH.

RICHARD N. DUNCAN

State Conservationist

Murph

United States Department of Agriculture

Soil Conservation Service

Suite 340 One Credit Union Place Harrisburg, PA 17110-2993

September 15, 1992

ENGINEERING FIELD HANDBOOK NOTICE PA-1

elian Hunt, Acting

You recently received a new Engineering Field Handbook (EFH) Chapter 13, "Wetland Restoration, Enhancement, or Creation" for the EFH, dated 1/92. This chapter replaces the old Chapter 13, which should be discarded.

This chapter initiates a new format for all Engineering technical directives, which will all be part of the National Engineering Handbook Series (NEHS). As part of the new format, the Engineering Field Manual has been renamed the Engineering Field Handbook (EFH), and is Part 650 of the NEHS. The remaining chapters of the EFH should continue to be used until they are revised or replaced under the new NEHS.

In keeping with the new format, this notice begins a new series of Pennsylvania EFH notices. Enclosed is an EFH Notice Register which should be kept in the front of the EFH.

RICHARD N. DUNCAN State Conservationist

Enclosure

DIST: All Holders of the Engineering Field Handbook